We Claim:

1. A method for modulating apoptosis in a cell comprising the step of administering to said cell an agent that inhibits apoptosis-induced eIF-5A function in said cell.

2. The method of claim 1, wherein said administering is performed *in vitro*.

3. The method of claim 1, wherein said administering is performed *in vivo*.

4. The method of claim 1, wherein said agent inhibits transcription of an apoptosis-induced eIF-5A gene.

5. The method of claim 1, wherein said agent inhibits translation of an apoptosis-induced eIF-5A gene transcript.

6. The method of claim 1, wherein said agent inhibits activation of an apoptosis-induced eIF-5A protein.

7. The method of claim 2, wherein said agent comprises an antisense apoptosis-induced eIF-5A construct.

8. The method of claim 3, wherein said agent comprises an antisense apoptosis-induced eIF-5A construct.

9. The method of claim 4, wherein said agent comprises an antisense apoptosis-induced DHS construct.

10. The method of claim 4, wherein said agent comprises a chemical or drug capable of inhibiting activation of an apoptosis-induced eIF-5A protein by apoptosis-induced DHS.

11. The method of claim 10, wherein said chemical or drug comprises spermidine, 1,3-Diamino-propane, 1,4-Diamino-butane (putrescine), 1,7-Diamino-heptane, or 1,8-Diamino-octane.

12. The method of claim 2, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced eIF-5A.

13. The method of claim 3, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced eIF-5A.

14. The method of claim 4, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS.

15. The method of claim 2, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced eIF-5A, wherein said

at least one mutation results in the reduction of functional apoptosis-induced eIF-5A, as compared to cells not having said at least one mutation.

16. The method of claim 3, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced eIF-5A, wherein said at least one mutation results in the reduction of functional apoptosis-induced eIF-5A, as compared to cells not having said at least one mutation.

17. The method of claim 4, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced DHS, wherein said at least one mutation results in the reduction of functional apoptosis-induced DHS, as compared to cells not having said at least one mutation.

18. The method of claim 4, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced DHS, wherein said at least one mutation results in the reduction of activated apoptosis-induced eIF-5A, as compared to cells not having said at least one mutation.

19. A method for modulating apoptosis in a cell comprising the step of administering to said cell an agent that inhibits apoptosis-induced DHS function in said cell.

20. The method of claim 19, wherein said administering is performed *in vitro*.

21. The method of claim 19, wherein said administering is performed *in vivo*.

22. The method of claim 19, wherein said agent inhibits transcription of an apoptosis-induced DHS gene.

23. The method of claim 19, wherein said agent inhibits translation of an apoptosis-induced DHS gene transcript.

24. The method of claim 22, wherein said agent comprises an antisense apoptosis-induced DHS construct.

25. The method of claim 23, wherein said agent comprises an antisense apoptosis-induced DHS construct.

26. The method of claim 22, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS.

27. The method of claim 23, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS.

28. The method of claim 22, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced DHS, wherein said at

least one mutation results in the reduction of functional apoptosis-induced DHS, as compared to cells not having said at least one mutation.

29. The method of claim 23, wherein said agent comprises an oligonucleotide that creates at least one mutation in endogenous apoptosis-induced DHS, wherein said at least one mutation results in the reduction of functional apoptosis-induced DHS, as compared to cells not having said at least one mutation.

30. A method for modulating apoptosis in a mammal comprising the step of administering to said mammal an agent that inhibits apoptosis-induced eIF-5A function in target cells of said mammal.

31. The method of claim 30, wherein said agent inhibits transcription of an apoptosis-induced eIF-5A gene in said target cells of said mammal.

32. The method of claim 30, wherein said agent inhibits translation of an apoptosis-induced eIF-5A gene transcript in said target cells of said mammal.

33. The method of claim 30, wherein said agent inhibits activation of an apoptosis-induced eIF-5A protein in said target cells of said mammal.

34. The method of claim 31, wherein said agent comprises an antisense apoptosis-induced eIF-5A construct.

35. The method of claim 32, wherein said agent comprises an antisense apoptosis-induced eIF-5A construct.

36. The method of claim 33, wherein said agent comprises an antisense apoptosis-induced DHS construct.

37. The method of claim 33, wherein said agent comprises a chemical or drug capable of inhibiting activation of an apoptosis-induced eIF-5A protein by an apoptosis-induced DHS protein in said target cells of said mammal.

38. The method of claim 37, wherein said chemical or drug comprises spermidine, 1,3-Diamino-propane, 1,4-Diamino-butane (putrescine), 1,7-Diamino-heptane, or 1,8-Diamino-octane.

39. The method of claim 31, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced eIF-5A in said target cells of said mammal.

40. The method of claim 32, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced eIF-5A in said target cells of said mammal.

41. The method of claim 33, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS in said target cells of said mammal.

42. The method of claim 31, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced eIF-5A in said target cells of said mammal, wherein said at least one mutation results in the reduction of functional apoptosis-induced eIF-5A, as compared to cells not having said at lest one mutation.

43. The method of claim 32, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced eIF-5A in said target cells of said mammal, wherein said at least one mutation results in the reduction of functional apoptosis-induced eIF-5A, as compared to cells not having said at lest one mutation.

44. The method of claim 33, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced DHS in said target cells of said mammal, wherein said at least one mutation results in the reduction of functional apoptosis-induced DHS, as compared to cells not having said at least one mutation.

45. The method of claim 33, wherein said agent comprises an oligonucleotide construct that creates at least one mutation in endogenous apoptosis-induced DHS in said target cells of said mammal, wherein said at least one mutation results in the reduction of activated apoptosis-induced eIF-5A, as compared to cells not having said at least one mutation.

46. The method of claim 30, wherein said mammal is a human.

47. The method of claim 30, wherein said administration is by intraperitoneal injection.

48. A method for modulating apoptosis in a mammal comprising the step of administering to said mammal an agent that inhibits apoptosis-induced DHS function in target cells of said mammal.

49. The method of claim 48, wherein said agent inhibits transcription of an apoptosis-induced DHS gene.

50. The method of claim 48, wherein said agent inhibits translation of an apoptosis-induced DHS gene transcript.

51. The method of claim 49, wherein said agent comprises an antisense apoptosis-induced DHS construct.

52. The method of claim 50, wherein said agent comprises an antisense apoptosis-induced DHS construct.

53. The method of claim 49, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS in said target cells of said mammal.

54. The method of claim 50, wherein said agent comprises an oligonucleotide construct that causes cosuppression of endogenous apoptosis-induced DHS in said target cells of said mammal.

55. The method of claim 49, wherein said agent comprises an oligonucleotide construct that creates mutations in endogenous apoptosis-induced DHS in said target cells of said mammal, wherein said mutations result in the reduction of functional apoptosis-induced DHS, as compared to cells not having said mutations.

56. The method of claim 50, wherein said agent comprises an oligonucleotide construct that creates mutations in endogenous apoptosis-induced DHS in said target cells of said mammal, wherein said mutations result in the reduction of functional apoptosis-induced DHS, as compared to cells not having said mutations.

57. The method of claim 30, wherein said mammal is a human.

58. The method of claim 30, wherein said administration is by intraperitoneal injection.

59. An antisense oligonucleotide comprising about 8 to 100 nucleobases targeted to a nucleic acid molecule encoding apoptosis-induced eIF-5A, wherein said antisense oligonucleotide specifically hybridizes with and inhibits the expression of apoptosis-induced eIF-5A.

60. The antisense oligonucleotide of claim 59 which is an antisense oligonucleotide.

61. The antisense oligonucleotide of claim 60 wherein the antisense oligonucleotide has a sequence comprising an 8 to 100 nucleotide portion of SEQ ID NO: 1, 3, 4, or 5 or has a sequence substantially complementary to a corresponding 8 to 100 nucleotide portion of one strand of a DNA molecule encoding apoptosis-induced eIF-5A, wherein the DNA molecule encoding apoptosis-induced eIF-5A hybridizes with SEQ ID NO:1, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO:5 or with a combination thereof, or is substantially complementary to at least a corresponding portion of an RNA sequence encoded by the DNA molecule encoding apoptosis-induced eIF-5A.

62. The antisense oligonucleotide of claim 60 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

63. The antisense oligonucleotide of claim 62 wherein the modified internucleoside linkage is a phosphorothioate linkage.

64. The antisense oligonucleotide of claim 60 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

65. The antisense oligonucleotide of claim 60 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

66. The antisense oligonucleotide of claim 60 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

67. A composition comprising the antisense oligonucleotide of claim 59 and a pharmaceutically acceptable carrier or diluent.

68. A method of inhibiting the expression of apoptosis-induced eIF-5A in mammalian cells or tissues comprising administering the antisense oligonucleotide of claim 59 to said cells or tissues, such that expression of apoptosis-induced eIF-5A is inhibited.

69. The method of claim 68, wherein said administration is *in vitro*.

70. The method of claim 68, wherein said administration is *in vivo*.

71. A method of inhibiting the expression of apoptosis-induced eIF-5A target cells of a mammal, comprising administering the antisense oligonucleotide of claim 59 to said mammal, such that expression of apoptosis-induced eIF-5A is inhibited in said target cells.

72. The method of claim 71, wherein said administration is by intraperitoneal injection.

73. An antisense oligonucleotide comprising about 8 to 100 nucleobases targeted to a nucleic acid molecule encoding apoptosis-induced DHS, wherein said antisense oligonucleotide specifically hybridizes with and inhibits the expression of apoptosis-induced DHS.

74. The antisense oligonucleotide of claim 73 which is an antisense oligonucleotide.

75. The antisense oligonucleotide of claim 74 wherein the antisense oligonucleotide has a sequence comprising an 8 to 100 nucleotide portion of SEQ ID NO: 6 or SEQ ID NO: 8 or has a sequence substantially complementary to a corresponding 8 to 100 nucleotide portion of one strand of a DNA molecule encoding apoptosis-induced DHS, wherein the DNA molecule encoding apoptosis-induced DHS hybridizes with SEQ ID NO:6, SEQ ID NO: 8, or with a combination thereof, or is substantially complementary to at least a corresponding portion of an RNA sequence encoded by the DNA molecule encoding apoptosis-induced eIF-5A.

76. The antisense oligonucleotide of claim 74 wherein the antisense oligonucleotide comprises at least one modified internucleoside linkage.

77. The antisense oligonucleotide of claim 76 wherein the modified internucleoside linkage is a phosphorothioate linkage.

78. The antisense oligonucleotide of claim 74 wherein the antisense oligonucleotide comprises at least one modified sugar moiety.

79. The antisense oligonucleotide of claim 74 wherein the antisense oligonucleotide comprises at least one modified nucleobase.

80. The antisense oligonucleotide of claim 74 wherein the antisense oligonucleotide is a chimeric oligonucleotide.

81. A composition comprising the antisense oligonucleotide of claim 73 and a pharmaceutically acceptable carrier or diluent.

82. A method of inhibiting the expression of apoptosis-induced DHS in mammalian cells or tissues comprising administering the antisense oligonucleotide of claim 73 to said cells or tissues, such that expression of apoptosis-induced DHS is inhibited.

83. The method of claim 68, wherein said administration is *in vitro*.

84. The method of claim 68, wherein said administration is *in vivo*.

85. A method of inhibiting the expression of apoptosis-induced eIF-5A target cells of a mammal, comprising administering the antisense oligonucleotide of claim 73 to said mammal, such that expression of apoptosis-induced eIF-5A is inhibited in said target cells.

86. The method of claim 85, wherein said administration is by intraperitoneal injection.